| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/698,812 | 10/30/2003 | Michele Covell | 200313228-1 | 2456 |

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| EXAMINER |
|---|
| HOANG, HIEU T |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2152 | |

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|---|---|
| 11/26/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/698,812 | COVELL ET AL. |
| | Examiner | Art Unit | |
| | Hieu T. Hoang | 2152 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>25 October 2007</u>.

2a)☐ This action is **FINAL**.  2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-44</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-44</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some *  c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>10/15/2007</u>

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

## DETAILED ACTION

1.      This office action is in response to communication filed on 10/25/2007.

2.      A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection.  Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114.  Applicant's submission filed on

10/25/2007 has been entered.

3.      Claims 1-44 are pending and presented for examination.


### *Response to Arguments*

4.      Applicant's arguments have been fully considered but they are not persuasive.

5.      35 USC § 101. The rejection of "computer usable medium" as a paper medium

still holds, as no rebuttal to this rejection has been submitted by the applicant. Applicant

argues that a computer usable medium having computer code embodied therein for

causing a computer to perform operations cannot be paper means. The examiner

respectfully traverses. As an example, a piece of paper can be scanned and processed

by a Optical character recognition software before computer codes can be read by the

processor. Therefore, it is a reasonable interpretation to read the claimed "a computer

usable medium" as a paper medium.

     Furthermore, since no explicit definition of "a computer usable medium" is found

in the specification. Given broadest interpretation to the word "usable," it is a reasonable

interpretation to read "a computer usable medium" over all computer usable media as a

transmission medium or transmission link such as optical or wired or wireless links.

Program codes definitely can be transported on a transmission link. Transmission link is

non-statutory. Therefore, claims 4 and 35-44 are directed to non-statutory subject

matter.

To expedite the prosecution of the case, it is suggested that the applicant

overcome the 35 U.S.C. 101 rejection by amending the claims to: "a computer storage

medium having stored thereon computer program codes that when executed by a

processor causing a computer to perform operations comprising"


6.      35 USC § 102 and 103.

7.      The first argument is on pages 15 and 16 of the Remarks wherein the applicant

argues that the content gateway in the prior art Menditto does not identify a type of

service to be performed on the item of content, and choose a service provider for

performing this type of service on this item of content. The examiner respectfully

traverses the argument. Menditto clearly discloses classifying HTTP requests at the

content gateway according to QoS service (using Differentiated Service or type of

service byte in the request, fig. 9, class type) that the request is qualified for (col. 14

lines 49-58, table 1, 2, appendix A, QoS classes), before connecting to the appropriate

service provider that satisfies the QoS class.

8.      The second argument is on pages 10 and 11 of the Remarks wherein the

applicant argues that the prior art does not teach: a service location manager and many

service providers. The examiner respectfully traverses the argument. Refer to the

embodiment in fig. 4 of Menditto, there is one content gateway for a ISP and many

service providers.

## *Claim Rejections - 35 USC § 101*

9.     35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10.    Claims 4 and 35-44 are rejected under 35 U.S.C. 101 as the claimed invention is

directed to non-statutory subject matter. "A computer usable medium having computer

usable code embodied therein" can be a piece of paper having written thereon

instructions of a software program, and is therefore non-statutory.

Furthermore, since no explicit definition of "a computer usable medium" is found

in the specification, it is a reasonable interpretation to read a computer usable medium

as a transmission medium or transmission link such as optical or wired or wireless links.

Transmission link is non-statutory. Therefore, claims 4 and 35-44 are directed under

U.S.C 101 as the claimed invention is related to non-statutory subject matter.

## *Claim Objections*

11.    Claims 2, 3, 4, 15, 25, 35 are objected to because the claim preambles are too

general. A more specific preamble for each claim is required.

12.    Claim 2 is objected to for containing typographical or grammatical errors. For

example, the claim recites "said item of content and type of service to be performed on

said item of content is identified during a session between a client device and said

service location manager, wherein said type of service is said identified before a service

result is provided to said client device." Applicant is requested to check for typographical

or grammatical errors in the remaining claims.

13.     Claim 2 is objected to for reciting "during a session between a client" (line 6),

although the claim has recited "a client device" in the preamble. Therefore, the phrase

will be treated as "during a session between the client." Applicant is requested to check

for subject matter that lacks antecedent basis in the remaining claims.


## Claim Rejections - 35 USC § 102

14.     The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.


15.     Claims 1-4, 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by

Menditto et al. (US 6,981,029, hereafter Menditto).


16.     For claim 1, Menditto discloses a method of selecting a media service provider

based on static resource information, said method comprising:

- identifying a type of service to be performed on an item of content before a
  service result is provided to a client device, wherein said item of content is
  identified during a session between a client device and a service location
  manager (col. 12, lines 23-27, a JPEG image request that requires additional
  processing in a session between a user and a web page, e.g. lfm.com, col. 3
  lines 11-16, content gateway intercepts the request and classify the request,
  classifying HTTP requests at the content gateway according to QoS service
  (using Differentiated Service or type of service byte in the request, fig. 9, class
  type) that the request is qualified for (col. 14 lines 49-58, table 1, 2, appendix A,
  QoS classes), before connecting to the appropriate service provider that satisfies
  the QoS class);

- selecting a service provider from a plurality of service providers based on static
  service provider information and static network information, said selecting of a
  service provider further based on service session information if said service
  session information has been received (fig. 2, col. 3 lines 11-16 and 51-61,
  selecting a best server that will deliver content data to the client the fastest with
  required security protection, close proximity, and availability of server's
  computing resource, col. 12, lines 23-27, additional processing); and

- providing information for transferring said session to said service provider,
  wherein said service provider performs said type of service on said item of
  content (col. 13, col. 14 lines 49-58, requests with a certain QoS (quality of

service, e.g. bandwidth, quality of media...) requirement is processed and

service is provided to the user accordingly).

17.    For claim 2, Menditto discloses a system for providing content to a client device,

said system comprising:

- a service location manager that selects a service provider that is capable of

  performing a type of service on an item of content from among a plurality of

  service providers based on static service provider information and static network

  information (fig. 2, col. 3 lines 11-16 and 51-61, content gateway selecting a best

  server that will deliver content data to the client the fastest with required security

  protection, close proximity, and availability of server's computing resource);

- said item of content and type of service to be performed on said item of content

  are identified during a session between the client device and said service

  location manager, wherein said type of service is identified before a service result

  is provided to said client device (col. 3 lines 11-16, content gateway intercepts

  the request and classify the request, classifying HTTP requests at the content

  gateway according to QoS service (using Differentiated Service or type of service

  byte in the request, fig. 9, class type) that the request is qualified for (col. 14 lines

  49-58, table 1, 2, appendix A, QoS classes), before connecting to the appropriate

  service provider that satisfies the QoS class)

- said service location manager further selecting said service provider based on

  service session information if said service session information has been received

(col. 13,  col. 14 lines 49-58, requests with a certain QoS (quality of service, e.g.

bandwidth, quality of media...) requirement is processed and service is provided

to the user accordingly).

18.     For claims 3 and 4, the claims are rejected for the same rationale in claim 1.

19.     For claim 15, the claim is rejected for the same rationale in claim 2.

20.     For claims 16, Menditto further discloses said static service provider and network

information is accessible by a service location manager (Menditto, col. 3 lines 51-61).

21.     For claim 17, Menditto further discloses said static service provider and network

information comprises information concerning computational and memory resources,

connectivity and expected bandwidth and latency between servers (col.3 line 60, which

server is most heavily loaded, meaning available computational and memory resources

and bandwidth are considered, col. 2 lines 64-66, best response time or best latency),

client and content addresses (col. 6 lines 25-30), session dispatch history (col. 4 lines

32-34, requests for components of a same web page belong to a same session),

network proximity (col. 3, lines 11-16) and the identity of special purpose hardware (fig.

2, hardware such as content gateway, CDN, and content servers have corresponding IP

addresses).

## *Claim Rejections - 35 USC § 103*

22.     The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

23.     Claims 5-14 and 18-44 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Menditto, as applied to claims 15, 17 above, in view of Bochmann et

al. (Quality of service management issues in electronic commerce applications,

hereafter Bochmann).

24.     For claim 5, Menditto discloses method of selecting a media service provider for

media based on static resource information, said method comprising:

- identifying a type of service to be performed on an item of content before a

    service result is provided to a client device, wherein said item of streaming

    content is identified during a session between said client device and a service

    location manager (col. 12, lines 23-27, a JPEG image request that requires

    additional processing in a session between a user and a web page, e.g. lfm.com,

    col. 3 lines 11-16, content gateway intercepts the request and classify the

    request, classifying HTTP requests at the content gateway according to QoS

    service (using Differentiated Service or type of service byte in the request, fig. 9,

    class type) that the request is qualified for (col. 14 lines 49-58, table 1, 2,

appendix A, QoS classes), before connecting to the appropriate service provider that satisfies the QoS class);

- selecting a service provider from a plurality of service providers based on static service provider information and static network information, said selecting of a service provider further based on service session information if said service session information has been received (fig. 2, col. 3 lines 11-16 and 51-61, selecting a best server that will deliver content data to the client the fastest with required security protection, close proximity, and availability of server's computing resource, col. 12, lines 23-27, additional processing); and

- providing information for transferring said session to said service provider, wherein said type of service provider performs said service on said item of content (col. 13, col. 14 lines 49-58, requests with a certain QoS (quality of service, e.g. bandwidth, quality of media...) requirement is processed and service is provided to the user accordingly).

Menditto does not explicitly discloses that the media is a streaming media.

However, Bochmann discloses the media is a streaming media (section 1-introduction, section 4, selection of server from a pool of servers for multimedia sessions such as video-on-demand using a QoS-broker)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Menditto and Bochmann in order to provide a multimedia QoS management scheme in order to optimize the overall cost-performance of the system and the users satisfaction (Bochmann, section 1-introduction)

25.     For claims 25 and 35, the claims are rejected for the same rationale in claim 5.


26.     For claims 6, 26 and 36, Menditto-Bochmann discloses the invention

substantially as in claims 5, 25 and 35. Menditto-Bochmann further discloses said static

service provider and network information is accessible by a service location manager

(Menditto, col. 3 lines 51-61).


27.     For claims 7, 27 and 37, Menditto-Bochmann discloses the invention

substantially as in claims 5, 25 and 25. Menditto further discloses said static service

provider and network information comprises information concerning computational and

memory resources, connectivity and expected bandwidth and latency between servers

(Menditto, col.3 line 60, which server is most heavily loaded, meaning available

computational and memory resources and bandwidth are considered, col. 2 lines 64-66,

best response time or best latency), client and content addresses (Menditto, col. 6 lines

25-30), session dispatch history (Menditto, col. 4 lines 32-34, requests for components

of a same web page belong to a same session), network proximity (Menditto, col. 3,

lines 11-16) and the identity of special purpose hardware (Menditto, fig. 2, hardware

such as content gateway, CDN, and content servers have corresponding IP addresses).


28.     For claims 8 and 28, Menditto-Bochmann discloses the invention substantially as

in claims 5 and 25. Menditto-Bochmann further discloses said special purpose hardware

comprises encryption and compression hardware (Bochmann, table 1, encryption, table 3, multimedia compression).

29.     For claims 9 and 29, Menditto-Bochmann discloses the invention substantially as in claims 5 and 25. Menditto-Bochmann further discloses said service session information comprises service session initiation and termination information (Bochmann, section 4.1, status of the network connection between the client and the server).

30.     For claims 10 and 30, Menditto-Bochmann discloses the invention substantially as in claims 9 and 29. Menditto-Bochmann further discloses said initiation and termination information provides information regarding the computational resources used in previous sessions (Bochmann, section 4.1, lines 7-8, information regarding the computational resources is pushed or requested to the QoS-broker).

31.     For claims 11 and 31, Menditto-Bochmann discloses the invention substantially as in claims 6 and 27. Menditto-Bochmann further discloses said session dispatch history comprises information concerning content length (Bochmann, section 4.1 line 4-5, size of the requested files or content length).

32.     For claims 12 and 32, Menditto-Bochmann discloses the invention substantially as in claims 5 and 29. Menditto-Bochmann further discloses said streaming content is

serviced and delivered to a client device as it is received (Bochmann, table 1,

encryption, streaming content that does not require encryption may be delivered as is).


33.    For claims 13 and 33, Menditto-Bochmann discloses the invention substantially

as in claims 12 and 32. Menditto-Bochmann further discloses non streamed content is

generated from said streaming content by said service provider (Bochmann, table 1,

encryption, non streamed content is just streaming content that was encrypted since

non stream content may not be played until being decrypted).


34.    For claims 14 and 34, Menditto-Bochmann discloses the invention substantially

as in claims 13 and 29. Menditto-Bochmann further discloses said streaming content is

serviced by said service provider and delivered to a client device as a non streamed file

(Bochmann, table 1, encryption, non streamed content is just streaming content that

was encrypted to be delivered to the user, non stream content may not be played until

being decrypted).


35.    For claims 18 and 38, the claims are rejected for the same rationale as in claim

8.

36.    For claims 19 and 39, the claims are rejected for the same rationale as in claim

9.

37.    For claims 20 and 40, the claims are rejected for the same rationale as in claim

10.

38.     For claims 21 and 41, the claims are rejected for the same rationale as in claim

11.

39.     For claims 22 and 42, the claims are rejected for the same rationale as in claim

12.

40.     For claims 23 and 43, the claims are rejected for the same rationale as in claim

13.

41.     For claims 24 and 44, the claims are rejected for the same rationale as in claim
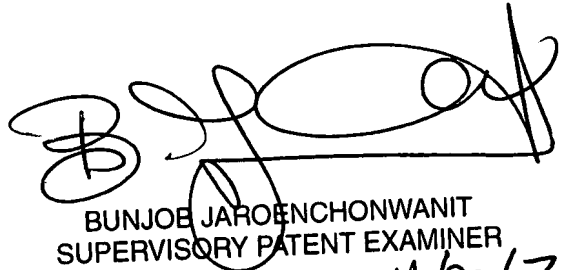
14.


### *Conclusion*

42.     Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-

1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m.,

EST.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HH

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11/20/7